

# ANNALS

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# ANNALS OF THE NEW YORK ACADEMY OF SCIENCES

Volume 711



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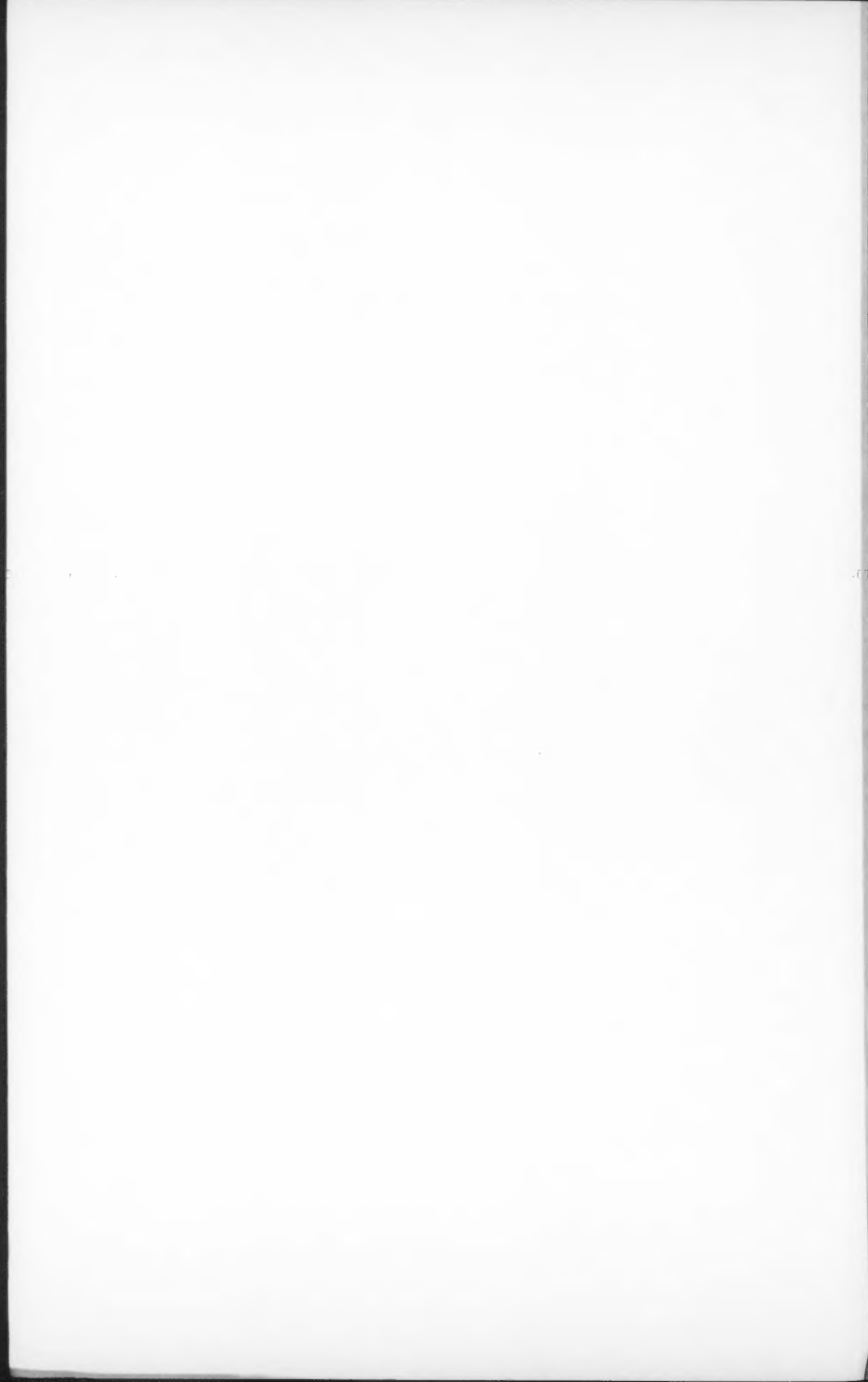
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## A NOTE ABOUT THE SUBJECT INDEX

The subject index for 1990-91 has again been generated by computer processing of paper titles. No reference has been made to the actual content of the articles. This means that only concepts explicitly mentioned in the authors' titles are included. The computer has no way of identifying possible relations among disciplines, or of related topics within disciplines. It has been "trained" only to attempt partial parsing of English statements (more specifically, to identify probable nouns and noun phrases) for the purposes of permuting titles and creating plausible entries, each starting with a useful indexing word.

In those cases where parsing has failed (for instance, where adjectives or adverbs have been mis-identified as nouns), more or less garbled entries can result. A human editor has skimmed through in an effort to remove or improve these. In addition, occasional liberties were taken with the original titles on input. Exceptionally long titles, for example (frequent on Poster Papers), may have been broken up into shorter segments. Some rephrasing has also been attempted by the editor where it was judged to be helpful to the computer's parsing strategy. But in general, the wording of index entries directly reflects the wording of the original title. If the entry word is not the original first word of the title, a semicolon somewhere in the entry will identify the original title start (the major permutation point.) In permuted titles the first comma in the entry will usually mark a permutation within the leading noun phrase.

Many common words (such as "Studies" or "Role", for example) which are not considered helpful as indexing points have been included in stoplists, and eliminated as entry starts.

Some terms appear in titles at times in full and at other times as abbreviations or acronyms. ("Human Immunodeficiency Virus" and "HIV," for example, are found in titles both ways.) To the extent that this has been anticipated by change lists, variants have been either standardized with automatic *see* references, or left as is and tagged with *see also* references.

Only nouns and noun phrases at the start of index entries are subject to "de-duplication," that is are treated as heads when there are subentries. Adjectives are not treated as heads except by accident, through parsing failure. The same word used as a noun will precede its use as an adjective. Thus, "Skeletal Muscle," as a noun phrase, may appear as a heading followed by subheads, while "Skeletal Muscle Fiber" will appear further on in its entirety as a new noun phrase ("Skeletal Muscle" in this case being an adjectival phrase).

Common introductory prepositions have been ignored in establishing the sort order of subentries. Thus "for Clinical Use" (sorted under "C" rather than "F") precedes "and Psychological Function," (sorted under "P" rather than "a").

Some other peculiarities specific to this index are:

1. Colons in the original titles have generally been rendered as the expression "Relative to" at the end of index items.
2. The problem of hyphen usage is a troublesome one. Title-writers vary widely in their approach, using (for example) "T-Cell" both as an adjective and a noun. In this index hyphens have been given the same sort value as wordspaces in order to group related ideas and to apply some degree of consolidation. However they do not have the same value as spaces when the program checks for duplication. This can result occasionally in interwoven lists of hyphenated and unhyphenated expressions where de-duplication might have been expected. Be alert.

3. Digits sort before letters of the alphabet. Look for numerical values at the start of each alphabet section.
4. An attempt has been made to consolidate singular and plural forms of some noun headings by means of checklists. This has generally only been done where a large number of subentries has been anticipated ("Gene(s)," for example). The resulting heading is filed under its plural form. Otherwise, the singular and plural forms must be sought separately under their respective spellings.
5. In chemical or mathematical expressions with modifying prefixes (e.g., 2,4,5-Trichlorophenoxyethanol) the computer has been taught to try to identify the prefixes and ignore them in sorting (putting the example under "T"). This has met with varying degrees of success, depending on the content of the prefix. The user is warned to take nothing for granted.
6. To avoid interior question marks in permuted statements, the phrase "Question of Whether" has often been used.

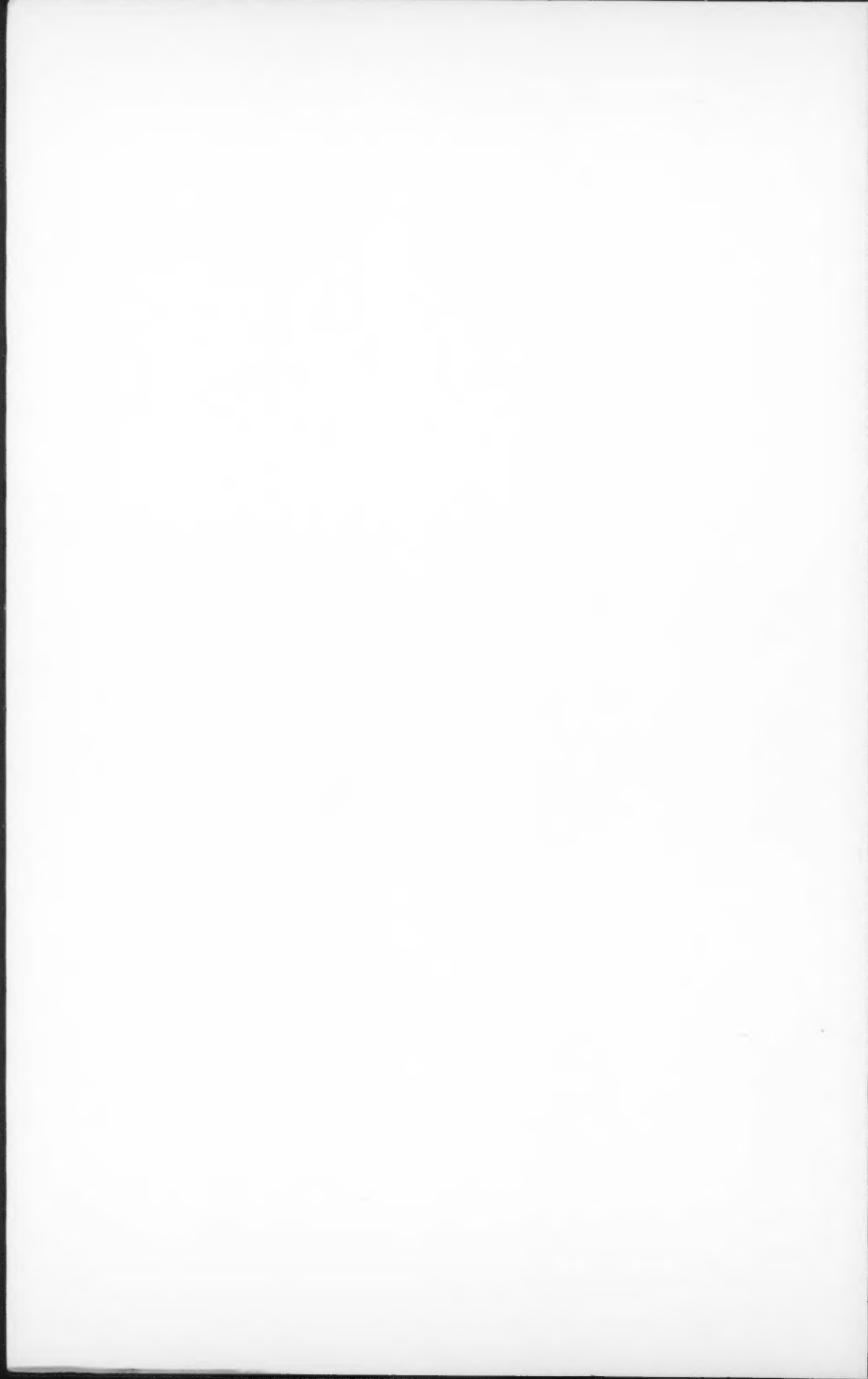
Comments, both as to usefulness and accuracy, are welcome and should be addressed to Justine Cullinan at the Academy.

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1994.

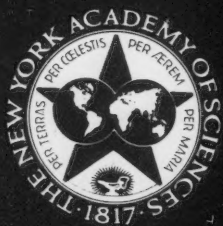
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